

## PATENT COOPERATION TREATY



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 21690 WO-Ws	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/014709	International filing date (day/month/year) 22 December 2003 (22.12.2003)	Priority date (day/month/year) 23 December 2002 (23.12.2002)
International Patent Classification (IPC) or national classification and IPC G01N 35/04, 35/00		
Applicant ROCHE DIAGNOSTICS GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 24 April 2004 (24.04.2004)	Date of completion of this report 01 September 2005 (01.09.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014709

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

the international application as originally filed

the description:

pages 1-28, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the claims:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages 1-17, filed with the letter of 18 January 2005 (18.01.2005)

the drawings:

pages 1/8-8/8, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
 the language of publication of the international application (under Rule 48.3(b)).  
 the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority in written form.  
 furnished subsequently to this Authority in computer readable form.  
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/fig. \_\_\_\_\_

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-17	YES
	Claims		NO
Inventive step (IS)	Claims	1-17	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

## 2. Citations and explanations

Reference is made to the following documents:

D1: US-A-4 218 421 (MACK JOHN C JR ET AL) 19 August 1980  
(1980-08-19)

D2: US-A-5 160 943 (ADELMANN FRED ET AL) 3 November 1992  
(1992-11-03).

Document D1, which describes an apparatus for carrying out automated biological tests using test strips and having a housing for the storage and automated transport of the test strips along a detector device, is considered the prior art closest to the subject matter of claims 1 and 13.

The subject matter of claim 1 differs from that known from document D1 in that

- the transport unit has at least one piezoelectric element which causes the contact surface of the transport unit to oscillate, wherein
- the at least one piezoelectric element causes the contact surface of the transport unit to oscillate.

The subject matter of claim 13 differs from document D1 in that the method comprises

- the actuation of a piezoelectric element of the transport unit in such a way that the contact surface of the transport unit is caused to oscillate, and
- the transport of the test element by the oscillating contact surface along a defined transport path in the analysis system.

The subject matter of claims 1 and 13 is therefore novel (PCT Article 33(2)).

The problem to be solved by the present application is therefore understood to be that of dispensing with lubricants and hence avoiding a possible reduction in the quality of the test elements owing to lubricant deposits. The above also permits a more compact structure.

For the following reasons, the solution to this problem, as proposed in claims 1 and 13 of the present application, involves an inventive step (PCT Article 33(3)):

Neither document D1 nor any other prior art document describes or suggests the above problem and the solution thereto specified in the application, that is to say, the use of a piezoelectric motor. Although document D2 discloses a piezoelectric motor for transporting a barcode label strip, which can be used, *inter alia*, for the analysis and distribution of samples (column 1, lines 51-56, column 5, lines 17-24, column 6, lines 17-40, figures 2, 4 and 6), document D2, which relates to a device for printing the labels, offers nothing to suggest that the above makes it possible to prevent a contamination of the

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label, or in this case of the transported strip-shaped objects, by lubricants, or that the use of a piezoelectric motor permits a more compact design of a test strip analyser.

Claims 2-12 are directly or indirectly dependent on claim 1, and claims 14 to 17 are directly or indirectly dependent on claim 13, and therefore likewise meet the PCT requirements for novelty and inventive step.